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The Mediating Role of Individual Motivation in the Link between Digital Leadership and Organizational Agility

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Abstract

This research examines the relationship between organizational agility and digital leadership, focusing on the mediating role of individual motivation within this relationship. It also examines how demographic variables affect digital leadership, organizational agility, and individual motivation. The study used the "Organizational Agility Scale," "Digital Leadership Scale," and "Individual Motivation Scale" to collect data. The survey was conducted among 480 public and private sector employees in Istanbul between May and July 2021. The data were analyzed using t-tests, ANOVA, and process analysis. The results indicate individual motivation plays a mediating role between organizational agility and digital leadership. In addition, significant differences were found in organizational agility, digital leadership, and individual motivation based on demographic factors such as marital status, gender, education level, employment sector, job position, management type, and professional experience. The study emphasizes the importance of digital development for effective leadership and suggests methods for improving agility and motivation in organizational settings.

Keywords: Motivation, Organizational agility, Digital leadership, Individual motivation, Agility, Leadership

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Introduction

The nature of leadership has evolved. In ancient times, leaders were primarily valued for their military prowess and ability to lead armies effectively on the battlefield. However, with the rise of the information era, the emphasis shifted to digitalization. As a result, leaders today are expected to be well-versed in digital technologies and information systems [1]. With the globalization of the economy, organizations are now tasked with being more agile, responding quickly, and acting efficiently. The shift to a more digitalized business environment has made digital literacy essential for leaders who operate in an internet-based and technology-driven world.

As companies have redefined their production and management strategies, the competitive landscape has intensified. International trade has opened up new avenues for organizations, but it is ultimately the human factor, particularly employee motivation, that drives an organization to achieve its objectives. Therefore, motivating employees has become crucial to organizational success.

This study explores the connection between digital leadership and organizational agility and investigates the role of individual motivation as a mediator in this relationship [2]. It also examines how demographic factors may influence digital leadership, organizational agility, and individual motivation. The research underscores the importance of digital transformation for effective leadership and presents suggestions to enhance organizational agility and individual motivation. This study adds value to the existing literature by offering insights into the intersection of digital leadership and organizational agility, with individual motivation serving as a crucial mediator.

Conceptual framework

Digital leadership

Digitalization has presented new opportunities, driving changes in business operations through the widespread adoption of computer and internet technologies, which in turn has facilitated the growth of digital leadership [3, 4]. These advancements have shifted the expectations of leaders. Today, leaders must quickly adapt to technological advancements and leverage digital tools and innovations to remain competitive [5]. Digital leadership, rooted in the upper-level theory developed by Hambrick and Masson [6], highlights the significant role of digital technologies in influencing leadership processes, and guiding decisions and actions in the digital realm.

A digital leader uses digital technologies to set strategic goals, inspire and engage team members, and drive long-term change [7]. Digital leadership is recognized for its ability to embrace agility and foster open information sharing, involving team members in the decision-making process [8]. Digital leaders are expected to engage in activities such as digital content analysis, online branding, continuous learning, cyber conflict resolution, decision-making, and leveraging social media for societal benefit [9-11]. By doing so, digital leaders can shape organizational culture, encourage innovation, and lead transformative efforts [12]. With the constant evolution of technology, only those who adapt and lead change effectively can ensure the successful integration of innovation within their organizations.

Organizational agility

Organizational agility is the capacity of a company to swiftly and effectively respond to internal and external changes. First coined in the 1990s, this concept underscores the importance of speed and resourcefulness in an organization's ability to adapt to shifting conditions in its environment [13]. For businesses to maintain a competitive edge, they need to react faster than their competitors, meet customer expectations, and capitalize on opportunities that arise from market changes [14, 15]. Organizations that are proactive in recognizing and addressing threats and opportunities, and are quick to mobilize resources accordingly, gain an advantage in their industries. Companies that are both agile and adaptable can leverage technological advancements and economic shifts more effectively in their operations and production [16].

Agility within an organization is composed of two essential facets: the quick perception of changes and the ability to act upon them. Agile companies are skilled at spotting innovation opportunities and risks rapidly and responding in an appropriate and timely manner, especially during periods of uncertainty [17]. These organizations are structured flexibly and possess leaders and employees capable of adjusting quickly to changes. Elements that define organizational agility include a culture that supports change, rapid responsiveness, integration, flexibility, minimal complexity, speed, quality, and the activation of core competencies. Agile organizations encourage continuous learning, flexible decision-making, and the development of competencies [18]. These companies also have strong foresight, and teamwork, and can recognize and respond to emerging trends.

Individual motivation

Motivation plays a central role in shaping an individual’s behavior, and it can stem from both internal and external influences. Intrinsic motivation is driven by internal emotional factors, while extrinsic motivation is influenced by external cognitive sources [19]. Intrinsic motivation is rooted in the personal interest or satisfaction an individual derives from the task itself, which can be enhanced through factors like job autonomy, meaningfulness, involvement, responsibility, diversity, creativity, opportunities for skill utilization, and recognition. In contrast, extrinsic motivation arises from external factors such as organizational policies, compensation, job security, status, supervision, interpersonal relationships, and working conditions (Hygiene) [20]. Both forms of motivation are crucial in influencing an individual's overall drive.

Motivation is a powerful force that enhances both individual and organizational productivity, driving employees to perform at their best. External motivators, such as rewards and recognition, and internal motivators, such as personal fulfillment, play key roles in this process [21]. Leaders have the responsibility of determining which motivational tools are most effective in encouraging high performance and achieving positive outcomes for both individuals and the organization.

Interconceptual relationship

A review of existing research shows extensive exploration into the links between Digital Leadership, Organizational Agility, and Individual Motivation. Scholars like Mıhardjo and Sasmoko [22], Kane *et al.* [23], Klein [24], Şahin *et al.* [25], Ordu and Nayır [10], Gök and Aydemir [26], Özmen *et al.* [27], Telli [28], and ErGyle (2021) have highlighted the significance of digital leadership in their studies, emphasizing its crucial role in motivating team members and enhancing organizational performance.

In addition, researchers such as Akkaya and Tabak [14], Basri and Zorlu [29], Joiner [30], Tallon *et al*. [31], Akkaya *et al.* [32], Cegarra-Navarro and Martelo-Landroguez [33], Menon and Suresh [34], Darvishmotevali *et al.* [35], Çetinkaya and Akkoca [36], Walter [37], and İmamoğlu *et al.* [17] have examined the concept of organizational agility, specifically focusing on its relationship with leadership and the organizational framework.

Furthermore, investigations by Uysal *et al.* [38], Yücel [39], Yılmaz [40], Aksoy [41], Eriş and Özdil [42], and Roozi and Tetik [43] have analyzed the factors and tools that influence employee motivation. These studies collectively demonstrate that digital leadership, organizational agility, and individual motivation are interconnected and play an integral role in fostering organizational success.

Materials and Methods

Study purpose

This research examines how individual motivation mediates the relationship between organizational agility and digital leadership.

Research framework and hypotheses

The study proposes that individual motivation serves as a mediator between organizational agility and digital leadership. The following hypotheses are put forward:

H1: Digital leadership has an impact on organizational agility.

H2: Digital leadership influences individual motivation.

H3: Individual motivation mediates the link between digital leadership and organizational agility.

H4: Individual motivation significantly varies across different demographic groups.

H5: Digital leadership significantly varies across different demographic groups.

H6: Organizational agility significantly varies across different demographic groups.

Figure 1 outlines the research framework that shows the mediating role of individual motivation in the relationship between digital leadership and organizational agility among employees in the private sector.

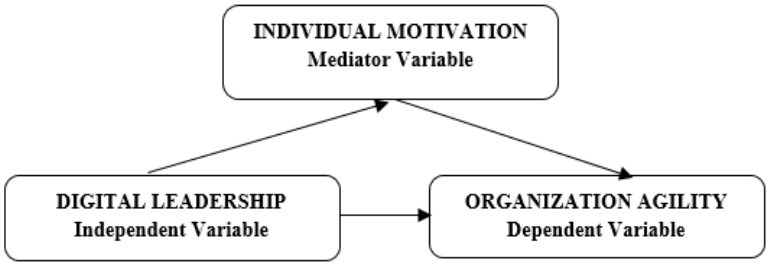

Figure 1. Research model

Data analysis approach

The analysis was performed using SPSS version 24.0. To assess the normal distribution of the scores, kurtosis, and skewness values were examined. A normal distribution is considered valid if the kurtosis and skewness coefficients range between +3 and -3 [44, 45]. **Table 1** provides the descriptive statistics for scale scores, the normality test outcomes, and the reliability coefficients.

Table 1. Descriptive statistics of scale scores, a test of normality and reliability coefficients

	N	Minimum	Maximum	Average	ss	Kurtosis	Skewness	Cronbach's alpha
Communication	480	10.00	50.00	35.23	10.28	-0.352	-0.540	0.953
Information	480	8.00	44.00	28.61	8.18	-0.331	-0.484	0.944
Digital leadership	480	18.00	90.00	63.84	8.27	-0.350	-0.521	0.974
Reputation	480	4.00	24.00	15.23	3.97	-0.360	-0.535	0.891

Altruism	480	4.00	24.00	15.96	3.97	0.621	-0.974	0.885
Reward	480	4.00	20.00	12.86	5.14	-1.033	-0.289	0.930
Individual motivation	480	12.00	66.00	44.05	10.41	0.149	-0.459	0.905
Competency	480	8.00	40.00	28.76	8.10	-0.398	-0.521	0.945
Flexibility	480	3.00	15.00	10.77	3.00	-0.319	-0.407	0.871
Responsiveness	480	3.00	15.00	10.97	3.07	-0.471	-0.429	0.885
Speed	480	3.00	15.00	10.98	3.21	-0.399	-0.571	0.917
Organizational agility	480	17.00	85.00	61.48	15.67	-0.132	-0.453	0.963

The analysis revealed average scores for various variables: communication (35.23), knowledge (28.61), digital leadership (63.84), reputation (15.23), altruism (15.96), reward (12.86), individual motivation (44.05), competence (28.76), flexibility (10.77), responsiveness (10.97), speed (10.98), and organizational agility (61.48). Kurtosis and skewness values were found to be within the range of -3 to +3, indicating that the data followed a normal distribution. As a result, parametric tests were applied. Cronbach's alpha was used to assess the reliability of the scales, with results indicating high reliability for digital leadership, individual motivation, and organizational agility (Cronbach's alpha values between 0.80 and 1.00). The sub-dimensions also exhibited strong reliability. T-tests and ANOVA were used to examine the differences in scale scores across demographic variables, applying t-tests for variables with 2 groups and ANOVA for those with more than two groups.

Research population and sampling

The study was conducted among employees from both the public and private sectors in Istanbul from May to July 2021. Ethical approval for the research (approval no. 2021/06-08, dated 20.05.2021) was granted by the ethics committee of Istanbul Esenyurt University. Using a convenience sampling approach, 480 participants were surveyed online between May 25 and July 25, 2021.

Data collection instruments

The research utilized a questionnaire divided into four sections. The first section collected demographic data, while the second focused on the " digital leadership scale," the third on the " organizational agility scale," and the fourth on the " individual motivation scale." A 5-point Likert scale was used (1= strongly disagree, 2 = disagree, 3= neutral, 4 = agree, 5 = strongly agree). The demographic questions covered aspects such as gender, age, education, employment sector, position, management style, and professional seniority.

The second section employed the information leadership scale (18 items) developed by Ulutaş and Araslan (2018) to assess participants' perceptions of digital leadership. The scale includes two sub-dimensions: communication and information, with a high reliability coefficient (Cronbach's alpha = 0.942). The third section utilized the Organizational Agility Scale (seventeen items) developed by Akkaya and Tabak [14], which includes four sub-dimensions: competence, flexibility, responsiveness, and speed. The scale's Cronbach alpha of 0.80 indicated its reliability. The fourth section used Wasko and Faraj's (2005) Individual Motivation Scale, which was adapted by Yıldırım (2019) and consists of 12 items across three sub-dimensions: reputation, altruism, and reward. The Cronbach's alpha values for the sub-dimensions were 0.921 (reward), 0.885 (mutual benefit), 0.877 (reputation), and 0.912 (altruism). Factor loadings for all items were found to exceed 0.7, with only the first question of reputation having a loading of 0.660, demonstrating the internal consistency of the scale.

Results and Discussion

The demographic analysis revealed that 51.3% of the participants were women, with 71.3% falling within the 18-30 age range. In terms of educational background, 47.5% of the participants held a college degree. A significant portion, 72.5%, were employed in the private sector, while 75.6% occupied non-managerial roles. Additionally, 42.4% of the respondents were lower-level managers, and 66.9% had less than 3 years of work experience. Correlation analysis results are presented in **Table 2**.

Table 2. Correlation analysis

		1	2	3	4	5	6	7	8	9	10	11	12
1. Communication	r	1											
	p												
	n	480											
2. Information	r	0.958**	1										
	p	0.000											

	n	480	480									
3. Digital leadership	r	0.992**	0.987**	1								
	p	0.000	0.000									
	n	480	480	480								
4. Reputation	r	0.663**	0.660**	0.669**	1							
	p	0.000	0.000	0.000								
	n	480	480	480	480							
5. Altruism	r	0.387**	0.440**	0.414**	0.636**	1						
	p	0.000	0.000	0.000	0.000							
	n	480	480	480	480	480						
6. Reward	r	0.631**	0.603**	0.625**	0.451**	0.295**	1					
	p	0.000	0.000	0.000	0.000	0.000						
	n	480	480	480	480	480	480					
7. Individual motivation	r	0.712**	0.717**	0.721**	0.847**	0.769**	0.778**	1				
	p	0.000	0.000	0.000	0.000	0.000	0.000					
	n	480	480	480	480	480	480	480				
8. Competency	r	0.668**	0.683**	0.682**	0.597**	0.475**	0.527**	0.669**	1			
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
	n	480	480	480	480	480	480	480	480			
9. Flexibility	r	0.654**	0.661**	0.664**	0.493**	0.376**	0.514**	0.585**	0.764**	1		
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
	n	480	480	480	480	480	480	480	480	480		
10. Responsiveness	r	0.597**	0.596**	0.603**	0.485**	0.314**	0.439**	0.521**	0.712**	0.802**	1	
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
	n	480	480	480	480	480	480	480	480	480	480	
11. Speed	r	0.538**	0.561**	0.554**	0.482**	0.298**	0.426**	0.508**	0.662**	0.713**	0.790**	1
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	n	480	480	480	480	480	480	480	480	480	480	480
12. Organizational agility	r	0.698**	0.712**	0.711**	0.597**	0.440**	0.544**	0.664**	0.939**	0.890**	0.880**	0.839**
	p	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	n	480	480	480	480	480	480	480	480	480	480	480

**P < 0.01

The analysis revealed various relationships between different scores. Communication demonstrated a weak positive correlation with the Altruism score (r=0.387) and a strong positive correlation with the individual motivation score (r =0.712), as well as a very strong relationship with the digital leadership score (r=0.992). The information showed a weak positive correlation with Altruism (r =0.440) and a strong positive relationship with the individual motivation score (r=0.717). The digital leadership score had moderate to strong positive relationships across several sub-dimensions, including a strong correlation with organizational agility (r=0.711). Reputation exhibited weak positive correlations with several dimensions, including reward (r = 0.451) and flexibility (r = 0.493), while showing a strong positive relationship with individual motivation (r=0.847). Altruism showed strong positive links to individual motivation (r=0.769), while reward had moderate to strong positive relationships with competency and organizational agility scores. Individual Motivation demonstrated moderate to strong positive relationships with competency (r=0.669) and organizational agility (r =0.664). Competency had strong positive correlations with flexibility (r=0.764) and organizational agility (r = 0.939). Flexibility and responsiveness also showed strong positive relationships with organizational agility scores (r =0.890 and r =0.880, respectively).

Further analysis indicated that removing digital leadership, individual motivation, and their respective sub-dimensions led to significant gender differences in motivation scores, with women scoring higher on average. An ANOVA analysis to examine age differences showed statistically significant variations in the communication, knowledge, and reward sub-dimensions, as well as in individual motivation and organizational agility scores. Individuals aged 18-30 scored higher than those in the 31-40 years age range. For the reputation sub-dimension, those over 41 years of age showed higher scores compared to individuals in the 31-40 years age range. Significant differences were also observed for competency, responsiveness, speed, and organizational agility, with younger employees (18-30 years) outperforming those aged 41 years and older.

ANOVA results examining differences in digital leadership, its sub-dimensions, individual motivation, and organizational agility based on educational status revealed significant variations (P<0.05). Specifically, individuals with an associate degree demonstrated higher average scores than those with postgraduate education. The Altruism sub-dimension also showed a

significant difference in educational background, with those holding undergraduate degrees scoring higher than those with postgraduate degrees.

T-test results assessing sector-based differences in digital leadership, its sub-dimensions, individual motivation, and organizational agility revealed statistically significant variations ($P<0.05$). On average, private sector employees scored higher than their public sector counterparts.

Further analysis using t-tests showed that differences in status (managerial vs. non-managerial) resulted in statistically significant variations in digital leadership, its sub-dimensions, individual motivation, and organizational agility ($P<0.05$). Non-managers, on average, had higher scores compared to managers.

ANOVA results examining the impact of managerial seniority on digital leadership, individual motivation, and organizational agility revealed significant differences ($P<0.05$) in the competence and responsiveness sub-dimensions, as well as organizational agility scores. Lower-level managers had higher average scores compared to both middle and upper-level managers. Additionally, seniority in managerial roles showed a meaningful difference in the speed sub-dimension ($P<0.05$), with middle-level managers scoring higher than lower-level managers.

Finally, ANOVA results analyzed the effect of workplace seniority on various dimensions of digital leadership, individual motivation, and organizational agility. Significant differences were observed ($P<0.05$) in communication, knowledge, digital leadership, competence, flexibility, responsiveness, speed, and organizational agility scores. Employees with less than three years of tenure scored higher on average than those with over eight years of experience. Furthermore, significant differences were noted in the reputation and reward sub-dimensions, as well as the individual motivation score, with employees having less than three years of experience scoring higher than those with 3-7 years of seniority.

Process analysis

A modern methodology using the bootstrap technique, known for providing valid and dependable results, was applied to evaluate the mediation effect [46-48]. The findings in **Table 3** highlight the mediating influence of the individual motivation dimension on the relationship between digital leadership and organizational agility. In this analysis, the indirect effects were investigated to understand the mediation role of individual motivation.

Table 3. The mediator role of the individual motivation dimension in the effect of the digital leadership dimension on the organizational agility dimension

	Bootstrap estimations		95% Reliability range		R^2	F
	B	Std. error	Bottom level	Top-level		
DL > OA	0.6102*	0.0276	0.5561	0.6644	0.5062	490.0393*
DL > IM	0.4111*	0.0181	0.3756	0.4466	0.5203	518.5460*
DL > OA	0.4154*	0.0379	0.3410	0.4898	0.5538	296.0100*
BM > OA	0.4740*	0.0665	0.3434	0.6046		
Indirect impact IM	0.1949	0.0341	0.1320	0.2658		
Full std. impact IM	0.6102	0.0276	0.5561	0.6644		

*P < 0.05 meaningful impact, P > 0.05 meaningless impact; process, DL: digital leadership, OA: organizational agility, and IM: individual motivation

The findings from the analysis indicate that digital leadership has a significant impact on organizational agility ($P<0.05$), and it also significantly influences individual motivation ($P < 0.05$). In the model that included both independent and mediator variables, the coefficient for digital leadership reduced from 0.6102 to 0.4154 after incorporating the mediating variables, signaling a decrease in digital leadership's effect on organizational agility. To assess whether there was a mediation or indirect effect (a.b), the bootstrap analysis was utilized, and it showed that if the confidence intervals for the indirect effect do not include zero, the mediation effect is considered statistically significant. The results confirm that Individual Motivation mediates the relationship between digital leadership and organizational agility.

These results are aligned with previous studies in the literature concerning organizational agility, digital leadership, and individual motivation. Mıhardjo and Sasmoko [22] demonstrated that digital leadership is a key driver of digital transformation and innovation. Klein [24] discussed how digital leaders must possess digital literacy and be supportive in their approach to lead digital transformations effectively. Ordu and Nayır [10] delved into the definition and importance of digital leadership. According to Gök and Aydemir [26], digital leadership is critical in crisis management, with information exchange serving as a mediator. Telli [28] emphasized the necessity of digital leadership in navigating digital transformations and fostering transformative leadership. Eryeşil [7] affirmed that digital leadership is crucial in the digital age. Basri and Zorlu [29] advocated for the integration of organizational agility into organizational culture, while Joiner [30] stressed its importance for leadership effectiveness. Akkaya *et al.* [32] found a substantial relationship between Organizational Agility and the

dynamic capabilities of executives, particularly in the industrial manufacturing sector. Çetinkaya and Akkoca [36] examined the role of leadership in fostering Organizational Agility, with communication being an essential factor. The impact of motivation tools on employees was explored by Özer and Özdemir (2018), while Orhaner and Mutlu (2018) identified how job satisfaction influences healthcare personnel's motivation. Uysal *et al.* [38] concluded that mobbing negatively affects employee motivation. Yücel [39] noted the influence of executives on employee motivation, while Yılmaz [40] pointed out the role of personal reinforcement in promoting organizational trust and motivation. Further studies by Aksoy [41], and Eriş and Özdil [42] explored various factors that impact employee motivation. Additionally, Roozi and Tetik [43] demonstrated the effect of organizational culture on motivating employees.

Conclusion

The findings of the analysis support the proposed hypotheses of the study. Leadership plays a crucial role in influencing organizational activities, with its impact extending to followers. A leader's ability to be agile, fast, innovative, and transformative significantly influences both organizational agility and employee motivation. When employees are motivated, they contribute to the effective and efficient achievement of organizational goals.

Regular learning and development initiatives should be implemented to equip current and potential leaders with the necessary skills and knowledge to effectively integrate technology into management practices. Providing employees with training in digital literacy will help cultivate a high-performance, innovative workforce. Simply renewing technology is not sufficient on its own; employees must also be trained to utilize it properly. The absence of both advanced technology and digitally skilled employees presents challenges to digital transformation. Achieving sustainable digital transformation requires appointing personnel dedicated to the process and fostering an environment that encourages new ideas and suggestions. Agile organizations need digital leaders who can support, guide, and motivate their teams, acting as role models. Digital leaders should focus on creating and maintaining intellectual capital and enhancing employee motivation. Motivational tools such as empowerment, rewards, recognition, promotions, gifts, and bonuses can increase individual motivation. Cultivating an agile organizational culture enhances employee performance and fosters innovative mindsets. An agile culture is essential in developing a vision for innovation. Digital leaders with an innovative outlook should operate in an adaptable structure, capable of developing new business models and strategies for innovation, while also possessing the vision to lead the digital transformation. They must seek out innovative talents and competencies to leverage new technologies effectively.

Limitations and future directions

The data for this study were collected during the onset of the Covid-19 pandemic, which introduced some limitations. The responses gathered may have been influenced by the pandemic's effects on public perception and the shift to fully remote work. Additionally, the study sample, which was restricted to public and private sector employees in Istanbul, may limit the broader applicability of the results. Future studies could benefit from a larger and more diverse sample to yield more robust findings. Expanding research to include different sectors and regions in Turkey could provide valuable insights and allow for comparisons. Future investigations could also explore Organizational Motivation within the context of sustainable human resources and organizational behavior, comparing the results with Individual Motivation.

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References

1. Glebova IS, Anisheva YA, Gorelova JN. Digitalization impact on social and economic development of territory (Russian regions). J Adv Pharm Educ Res. 2020;10(3):214-9.
2. Tleuzhanova GK, Sarzhanova GB, Joldanova DK, Eskzinova ZA, Assanova DN. The role of its technologies in the formation of student leadership. J Adv Pharm Educ Res. 2019;9(2):89-94.

3. Machado CG, Winroth M, Carlsson D, Almström P, Centerholt V, Hallin M. Industry 4.0 readiness in manufacturing companies: challenges and enablers towards increased digitalization. Proc Cırp. 2019;81:1113-8.
4. Öztırak M, Orak B. Uzaktan çalışma süreçlerinde dijital zorbalığın örgütsel dışlanmaya etkisi üzerine bir çalışma. Bus Manag Stud İnter J. 2022;10(2):605-30.
5. Petrucci T, Rivera M. Leading growth through the digital leader. J Leadership Stud. 2018;12(3):53-6.
6. Hambrick DC, Masson PA. Upper echelens: the organization as a reflection of its top management. Acad Manag Rev. 1986;9(2):193-206.
7. Eryeşil K. Digital leadership, leadership paradigm of the digital age: a conceptual framework. Equinox J Econ Bus Political Stud. 2021;8(1):98-112.
8. Petry T. Digital leadership. In North K, Majer R, Haas O, eds. Knowledge management in digital change: new findings and practical cases. Cham: Springer; 2018.
9. Miller CL. Digital leadership: using the internet and social media to improve the lives, well-being, and circumstances of others. J Family Consumer Sci. 2018;110(1):45-8.
10. Ordu A, Nayır F. What is digital leadership? A suggestion of the definition. E-International J Educ Res. 2021;12(3):68-81.
11. Öztırak M, Bayram V. Sağlık çalışanlarının kayırmacılık algıları ile örgütsel sessizlik davranışları arasındaki ilişkinin incelenmesi: kamu ve özel hastaneler üzerinde karşılaştırmalı bir araştırma. Bus Manag Stud: An Inter J. 2022;10(3):956-76.
12. Oberer B, Erkollar A. Leadership 4.0: digital leaders in the age of industry 4.0. Int J Organ Leadersh. 2018;7(4):404-12.
13. Zitkiene R, Deksnys M. Organizational agility conceptual model. Monten J Econ. 2018;14(2):115-29.
14. Akkaya B, Tabak A. Örgütsel çeviklik ölçeğinin türkçeye uyarlanması: geçerlik ve güvenirlik çalışması. İş İnsan Derg. 2018;5(2):185-206.
15. Ravichandran T. Exploring the relationships between ıt competence, ınnovation capacity, and organizational agility. J Strategıc Inf Syst. 2018;27(1):22-42.
16. Belousova NA, Korchemkina YV, Matuszak AF, Fortygina SN, Shulgina TA, Kovtun RF, et al. Digital environment components for the formation of students' information and skills. J Adv Pharm Educ Res. 2020;10(4):118-25.
17. İmamoğlu SZ, İnce H, Türkcan H. Endüstri 4.0 uygulamalarının örgütsel çeviklik üzerindeki etkisi: kavramsal bir çalışma. Atatürk Üniv İktisadi İdari Bil Derg. 2021;35(1):103-24.
18. Akkaya B, Bayram V. Yönetim araştırmalarında postmodern bir liderlik: çevik liderlik. Yönet Ekon Pazarl Araşt Derg. 2021;5(3):173-88.
19. Liu Y, Hou S. Potential reciprocal relationship between motivation and achievement: a longitudinal study. Sch Psychol Int. 2017;39(1):38-55.
20. Aslan M, Doğan S. Dışsal motivasyon, içsel motivasyon ve performans etkileşimine kuramsal bir bakış. Süleyman Demirel Üniv Vizyoner Derg. 2020;11(26):291-301.
21. Yıldırım E. Sosyal sermaye ve bireysel motivasyon faktörlerinin bilgi paylaşma niyeti üzerine etkisi. Yüksek Lisans Tezi. Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul; 2019.
22. Mıhardjo LWW, Sasmoko S. Digital transformation: digital leadership role in developing business model ınnovation mediated by co-creation strategy for telecommunication ıncumbent firms, Strategy and Behaviors in the Digital Economy, InTechopen; 2019. p. 1-18.
23. Kane GC, Phıllıps AN, Copulsky J, Garth A. How digital leadership is(n't) different. MIT Sloan Mana Rev. 2019;60(3):34-9.
24. Klein M. Leadership characteristics in the era of digital transformation. Bus Manag Stud İnter J. 2020;8(1):883-902.
25. Şahin ÇÇ, Avcı YE, Anık S. Dijital liderlik algısının metaforlar yoluyla incelenmesi. Elek Sos Bil Derg. 2020;19(73):271-86.
26. Gök SG, Aydemir P. Dijital liderliğin kriz yönetimi üzerindeki etkisi: bilgi paylaşımının aracı rolü. Güv Bil Derg. 2021;10(3):195-222.
27. Özmen ÖNT, Eriş ED, Özer PS. Dijital dönüşüm ve liderlik: sanayi sektöründe bir inceleme. Kafkas Üniversitesi İİBF Dergisi, 13(Kongre Özel Sayısı); 2022. p. 206-31.
28. Telli E. İşletmelerin dijital dönüşüm yolculuğunda liderlik: transformasyonel (Dönüşümcü) liderlikten dijital liderliğe. Aksaray Üniv İktisadi ve İdari Bil Fak Derg. 2022;14(3) 307-18.
29. Basri S, Zorlu K. Örgüt kültürü algısının örgütsel çeviklik üzerindeki etkisinin incelenmesi. Sos Ekon Araşt Derg. 2020;20(39):147-64.
30. Joiner B. Leadership agility for organizational agility. J Creating Value. 2019;5(2):139-49.
31. Tallon PP, Queiroz M, Coltman T, Sharma R. Information technology and the search for organizational agility: a systematic review with future research possibilities. J Strateg Inf Syst. 2019;28(2):218-37.

32. Akkaya B, Kayalıdere UAK, Tabak A. Endüstriyel alanda üretim yapan firmaların örgütsel çevikliği ile firma yöneticilerinin sahip olduğu dinamik yetenekler arasındaki ilişki: manisa organize sanayi bölgesinde (MOSB) faaliyet gösteren firmalar üzerine bir araştırma. Yeni Nesil Girişimcilik Ekon. 2019;1(2):19-54.
33. Cegarra-Navarro JG, Martelo-Landroguez S. The effect of organizational memory on organizational agility: testing the role of counter-knowledge and knowledge application. J Intellectual Capital. 2020;21(3):459-79.
34. Menon S, Suresh M. Factors influencing organizational agility in higher education. Benchmarking: An Inter J. 2020;28(1):307-32.
35. Darvishmotevali M, Altinay L, Köseoglu MA. The link between environmental uncertainty, organizational agility, and organizational creativity in the hotel industry. Int J Hosp Manag. 2020;87:102499.
36. Çetinkaya FF, Akkoca Y. Stratejik liderlik ile örgütsel çeviklik arasındaki ilişkide örgütsel iletişimin aracı rolü. Mehmet Akif Ersoy Üniv İktisadi İdari Bil Fak Derg. 2021;8(1):66-84.
37. Walter AT. Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. Manag Rev Q. 2021;71(2):343-91.
38. Uysal B, Ekici MA, Önal AC, Kulakoğlu E. Investigating the relationship between mobbing and employee motivation. Bus Manag Stud İnter J. 2019;7(1):280.
39. Yücel Ş. Yöneticilerin çalışan motivasyonu üzerindeki etkisi: gaziosmanpaşa İlçesi okullarında bir uygulama. Yüksek Lisans Tezi, İstanbul Gelişim Üniversitesi Sos Bilimler Enstitüsü, İstanbul; 2019.
40. Yılmaz N. Personel güçlendirmenin örgütsel güven ve çalışan motivasyonuna etkisi: otel işletmelerinde bir araştırma. Yüksek Lisans Tezi., Kırklareli Üniversitesi Sos Bilimler Enstitüsü, Kırklareli; 2019.
41. Aksoy ŞK. Çalışanların motivasyonunu etkileyen faktörler: mehmet Akif Ersoy Üniversitesinde bir analiz. Akdeniz Üniv Sos Bil Enstit Derg. 2020;(7):89-111.
42. Eriş H, Özdil ES. Özel hastane personelinin motivasyonunu etkileyen faktörler. Sos Araşt Yönetim Derg. 2020;(1):1-8.
43. Roozi MA, Tetik S. Örgüt kültürü ile personel motivasyonu arasındaki ilişkiye yönelik karşılaştırmalı bir araştırma: Türkiye ve Afganistan örneği. Süleyman Demirel Üniv Vizyoner Derg. 2022;13(36):1354-75.
44. Hopkins KD, Weeks DL. Tests for normality and measures of skewness and kurtosis: their place in research reporting. Educ Psychol Meas. 1990;50(4):717-29.
45. DeCarlo LT. On the meaning and use of kurtosis. Psychol Methods. 1997;2(3):292.
46. Williams J, MacKinnon DP. Resampling and distribution of the product methods for testing indirect effects in complex models. Struct Equ Model. 2008;15(1):23-51.
47. Hayes AF, Rockwood NJ. Regression-based statistical mediation and moderation analysis in clinical research: observations, recommendations, and implementation. Behav Res Ther. 2017;98:39-57.
48. Hayes AF. Partial, conditional, and moderated mediation: quantification, inference, and interpretation. Commun Monogr. 2018;85(1):4-40.